

## TRANSPORTABLE CHARACTER-CENTRIC GAMING FOR WIRELESS LAN HOTSPOTS

### TECHNICAL FIELD OF THE INVENTION

5 The present invention generally relates to gaming, and, more particularly, to a system and method for allowing multi-user gaming at wireless hotspots wherein gaming users can save and transport gaming characters for use in future games and future gaming experiences.

### 10 BACKGROUND OF THE INVENTION

Typical computer games allow users to develop a character throughout the play of the game. Current games allow the user to develop a character (the term "character" as used herein refers to the user's in-game persona, such as a person in the game, a car, robot, etc.) throughout the play of the game in single-user mode.

15 When a user desires to "save" a game, the user's saved games store a "point" in the game (i.e., most games have a linear storyline and saving the game merely saves a point in the story). Typically, the user's character develops during the course of a game, and by the time the game is solved the user has usually created a highly developed character. Unfortunately, upon solving/completing the game, that 20 character may not be used for any further play. The beginning of a new game requires starting over with a new character.

25 Multi-user modes exist, but although the character might develop during a given session (for example, the user's game character might pick up more powerful weapons), that character's development cannot be saved for future play in, e.g., a new game.

### SUMMARY OF THE INVENTION

The present invention provides gaming capabilities to users at, e.g., wireless hotspots wherein users can save their gaming characters at any desired point in a game and transport them for play and development in future games which may be 30 the same or different from the original game in which the character was saved, and which may be played at the same or other hotspots. Advantageously, a character's development can thus be saved and further developed over time during and for

playing with, e.g., different users at different wireless hotspots independent of the original game in which the character was saved.

According to an aspect of the present invention, a method for providing transportable character-centric gaming at a wireless Local Area Network (WLAN)

5 hotspot to a user is provided comprising the steps of providing a first gaming server at a first WLAN hotspot, wherein the gaming server is accessible from the WLAN hotspot. At least one first selectable game is provided at said first gaming server having at least one savable character. The capability to save the savable character at an arbitrary point in the first game onto a transportable medium to form a current 10 saved character is provided, wherein the current saved character is loadable in a future game.

According to another aspect of the present invention, a method for transportable character-centric gaming is provided comprising the steps of providing at least one first selectable game having at least one savable character, wherein

15 said savable character is savable independent of the first game. The capability to save the at least one savable character at an arbitrary point in the at least one first game onto a transportable medium to form a saved character is provided. Further, the capability to load the saved character for play in at least one of said first selectable game or other games is also provided.

20 These, and other aspects, features and advantages of the present invention will be described or become apparent from the following detailed description of the preferred embodiments, which is to be read in connection with the accompanying drawings.

**BRIEF DESCRIPTION OF THE DRAWINGS**

In the drawings, wherein like reference numerals denote similar elements throughout the views:

5 FIG. 1 is an exemplary illustration of a system for the transportable character-centric gaming for wireless hotspots, according to an embodiment of the present invention.

FIG. 2 is an exemplary flowchart of a method for transportable character-centric gaming for wireless hotspots, according to an embodiment of the present invention.

10 FIG. 3 is an exemplary flow diagram depicting an example of the process of step 217 in FIG. 2 for saving and updating characters according to an aspect of the present invention.

**DETAILED DESCRIPTION OF THE INVENTION**

15 It should be understood that the elements shown in the FIGS. may be implemented in various forms of hardware, software or combinations thereof. Preferably, these elements are implemented in software on one or more appropriately programmed general-purpose devices, which may include a processor, memory and input/output interfaces.

20 The present invention approaches multi-user gaming from a character's perspective and provides users with the ability to develop their character over time as they play with, e.g., other users at different hotspots. In one aspect of the present invention, wireless hotspots offer multi-user gaming wherein a user can play games against other users at the same hotspot. Thus while at the hotspot, the user can 25 play other users who are physically nearby (i.e., connected to the same hotspot).

Preferably, the present invention permits the user to save a character onto a transportable medium, e.g., locally on a user's mobile device. Advantageously, the present invention "saves" or stores a character and its attributes independent of the game, and is not to be confused with merely saving a point in the game.

30 In addition, because the character is stored locally onto a transportable medium (e.g., the user's mobile device), the character can be transported with the

user. This allows the user to play with the saved character in different gaming environments against different users at other wireless hotspots.

Referring now to the Figures, FIG. 1 depicts an exemplary illustration of a system setup 100 for transportable character-centric gaming for wireless hotspots according to an embodiment of the present invention. The system 100 includes a WLAN (wireless local area network) hotspot base station 101 for coordinating communications. It is to be noted that the term "hotspot" denotes e.g., any company providing Internet connection, local area network and/or virtual private network (VPN) access from a given location.

The base station 101 is in communication with a WLAN hotspot wireless access server 105 preferably via e.g., a wired connection 102 for providing access to the Internet, local area network and/or VPN. According to an aspect of the present invention, each hotspot includes a WLAN hotspot gaming server 103 for storing at least one game and/or gaming environment. The game(s) may include, for example, any variety of computer games (e.g., car racing, arcade, combat games, role playing games, etc.) and include game-provided characters. The gaming environment(s) include, e.g., computer game settings without characters.

The base station 101 is in communication with the gaming server 103 preferably via, e.g., a wired connection 104. The WLAN base station 101 coordinates communications between each WLAN user 107 with other users within the same hotspot, with the gaming server, and with the wireless access server 105. It is to be noted that a WLAN user 107 is in wireless communication with the base station 101 to access server 105 for connection with, e.g., the Internet. Each WLAN user 107 is also in wireless communication with the base station 101 for connection to/communication with the gaming server 103.

For purposes of explanation of FIG. 1, each user 107 preferably utilizes e.g., a mobile device which is in wireless communication with the base station 101 via e.g., a transceiver. Such mobile device may comprise, for example, a laptop computer, PDA, hand-held gaming device, etc. Each user 107 has the capability to save a game character locally on, e.g., the mobile device. In the present specification, the term "character" denotes the person/object that the user controls in the game.

Advantageously, a game character may be saved and is usable independent of the actual game in which it was initially saved. Thus, instead of saving the user's progress in a particular game, the user can save a character (person, car, robot, etc.). The character is preferably stored on a transportable medium (mobile device, 5 laptop, floppy disk, CD, etc.). This permits the user to continue to use and develop the character in, e.g., new games against other users at different hotspots.

FIG. 2 is an exemplary flowchart 200 of a method for transportable character-centric gaming for wireless hotspots, according to an embodiment of the present invention. In step 201, a user logs onto a wireless LAN hotspot. The user may 10 access a hotspot gaming server and select a game for play (step 203). The gaming server preferably offers at least two forms of games, games with characters (i.e., games having game-provided characters) and gaming environments (i.e., gaming settings without characters).

If the user selects a game with characters (step 204), the user proceeds to 15 decision step 205, where it is ascertained whether the user has a previously saved character pertinent to/usable with the selected game which is desired to be used for play again. Preferably, the saved character has been saved onto a transportable medium, e.g., a laptop, PDA, floppy, disk, etc. If no, the user commences play of the game (step 209). It is to be noted that if the user does not have a previously saved 20 character and/or if the user does not desire to use a previously saved character, the user would typically have to start off with a 'new' character (e.g., an existing game-provided character) to commence play of the game.

If yes, the transportable medium including the saved character is loaded onto the gaming server and the saved character is loaded/entered for use in the selected 25 game (step 207) and play of the game is then commenced (step 209) using the saved character.

If the user selects a gaming environment (step 206), the process proceeds to step 207. It is to be noted that for a user to utilize the gaming environment for play, it is necessary for the user to already have a previously saved character. In step 30 207, the user then may enter the saved character (from e.g., the user's mobile device, a CD, floppy disk, etc.) for play in the gaming environment. Thus, the process proceeds to step 209.

At decision step 211, it is ascertained whether the user wishes to discontinue play. If no, play is continued (return to step 209). If yes, decision box 213 ascertains whether the user desires to save the current character (i.e., the character developed up to the point of the game at which the user desires to discontinue play). If no, the 5 game is ended (step 215). If yes, the character is saved (step 217), preferably on a transportable medium (e.g., onto a mobile device such as a laptop, PDA, etc.; onto storage media such as a floppy disk, CD, etc.). Thus, the user may save the character at any arbitrary point in the game (i.e., at any desired time during play of the game). After saving, the user is logged off. The user may return to step 201 if 10 desired to log onto the same or a different hotspot to start a new game. It is to be noted that the process of saving a character is described further in FIG. 3 below.

FIG. 3 is an exemplary flow diagram 300 depicting an example of the process of step 217 in FIG. 2 for saving and updating characters according to an aspect of the present invention. In decision box 301, it is ascertained whether any previously 15 saved character(s) exists for the selected game. If no, the current character is saved to form a current saved character (step 303), the user is logged off and the process returns to step 201 of FIG. 2 (step 305).

If yes, in decision box 307, it is ascertained whether the user would like to delete any of the previously saved character(s) and replace same with the current 20 character. If yes, the user selects the desired previously saved character(s) to be deleted which is then replaced with the current character (step 309) and the user is logged off. If no, the previously saved character(s) is retained while the current character is additionally saved and the user is logged off (step 311). Following both 25 steps 309 and 311, the process may then return to step 201 if the user desires to log on again.

It is to be noted that the present invention may further provide wherein 30 multiple instances of the same character (e.g., different versions/levels of the same character) may be saved. For example, a user may desire to save a particular car, but according to an aspect of the present invention may save multiple versions of the same car, e.g., one version of the same car which is outfitted for highway racing and another version of the car which is equipped for off-road racing.

Additionally, it is to be noted that the present invention provides functions which permit a user to delete any saved characters as desired and to update saved characters at any time thus permitting the user to effectively and conveniently manage saved characters at the user's discretion.

5 To illustrate an exemplary use of the present invention, a user may log onto a wireless hotspot with a mobile device (e.g., laptop, PDA) and access a hotspot gaming server, where the user will have the option of selecting a variety of games to play. Examples of games include car racing, fighting/shooting games, or role-playing games. Examples of the user's character can include, for instance, a person  
10 in the game, a robot, or a car.

15 To explain the idea, suppose the user is going to play a game for the first time (i.e., the user's character isn't developed yet). If it's a racing game, the user's car will be slow; if it is a shooter game, the user won't have powerful weapons or armor, and if it is a role-playing game (RPG), the user's character won't have much experience points or skills.

20 Suppose that the user then plays a few games while at a hotspot. In these games, the user can play against, e.g., other users who are physically present at the same hotspot, or can play against users at other hotspots. If it's a racing game, the user might win a few races which could earn money in the game for the user. This money might be spent to buy a faster car. If it's a shooter game, the user might have picked up extra armor or more powerful weapons. If it's a RPG, the user might have earned more experience points and gained new skills. Thus, the user's character is continuously developed as the user plays the game.

25 The present invention would then allow the user to save the "character" at any time locally on, e.g., the mobile device (i.e., as opposed to a network). By doing so, the user is not saving the "game" (i.e., the point in the particular game being played) as prior art games allow a user to do. Instead, the user is able to save his/her character independent of the game. The invention further permits the user to "transport" the character for use in playing future games. Such future games may  
30 comprise, e.g., the same game or different games than the original game in which the character was originally saved. It is to be noted that these different games should preferably comprise the same type/genre/format of game as the original

game for most effective use of the saved character. Further, it is to be noted that the user can later go to a hotspot (the same hotspot or a completely different one) and use the saved developed character to play others at that location.

Thus, the present invention introduces the concept of a saved developed and transportable character. This saved character can be transported to and used in different gaming environments. For example, suppose the user goes to a given hotspot and races a car on the tracks available there. The user can save the car at any time during the game and take the saved character to another hotspot. That new hotspot might offer different race tracks there and the user advantageously can use the same car to race the users at the new hotspot.

Advantageously, the present invention provides for weapons, skills and other attributes of a character to be developed over time and used in a variety of different environments (e.g., one hotspot might let the users fight in a city environment whereas another hotspot might let the users fight in a forest environment).

Furthermore, the present invention offers wireless hotspot providers a means for attracting users to visit their hotspot and stay logged on longer (thus generating more airtime revenue). It also offers users games with more replay value because it provides the ability for users to continually develop their characters over time instead of just playing a linear game, solving it and having to start over again. For example, as the user goes to different hotspots, he can continue to use and develop his character in games against other users at those hotspots.

In addition, the present invention provides gaming servers at hotspots which may offer games that provide various environments/settings without characters (i.e., "gaming environments"). Users could play with any of their saved characters in these various environments. Thus, users may select from a number of different environments in which to use their saved characters for play, and users may play each other using their respective saved characters from other games.

It is further to be noted that users who are outside of a particular hotspot may access the gaming server of that hotspot via, e.g., the Internet, to play users at that hotspot.

While envisioned for wireless hotspots, the concept of the present invention can apply to conventional gaming consoles as well. According to another

embodiment of the present invention, users of a gaming console (such as the Sony Playstation® 2 or XBox®) can save their characters on the console's portable memory cards and take them to, e.g., other users' homes to play other users in new games. According to another aspect of the present invention, the gaming console 5 could offer games which provide various gaming environments/settings and users could input their saved characters for play in these various environments. Thus, users may select from a number of different environments in which to use their saved characters and also, play with other users having different saved characters. Advantageously, a potentially limitless number gaming environment/character 10 combinations exist for providing a unique gaming experience each time. Accordingly, for this embodiment it is to be noted that steps 201 and 203 of FIG. 2 may be substituted, for example, with a step 202 in which a game is accessed and selected from a gaming console.

Although the embodiment which incorporates the teachings of the present 15 invention has been shown and described in detail herein, those skilled in the art can readily devise many other varied embodiments that still incorporate these teachings. Having described preferred embodiments for a system and method for allowing multi-user gaming at wireless hotspots wherein gaming users can save and transport gaming characters for use in future games and future gaming experiences 20 (which are intended to be illustrative and not limiting), it is noted that modifications and variations can be made by persons skilled in the art in light of the above teachings. It is therefore to be understood that changes may be made in the particular embodiments of the invention disclosed which are within the scope and spirit of the invention as outlined by the appended claims. Having thus described 25 the invention with the details and particularity required by the patent laws, what is claimed and desired protected by Letters Patent is set forth in the appended claims.